Inside Wallops

National Aeronautics and Space Administration
Goddard Space Flight Center
Wallops Flight Facility, Wallops Island, Va.

Volume XX-07 Number 18 May 7, 2007

NASA Mission Checking the Health of Greenland's Ice Sheets

A NASA Wallops led research team is in Greenland this month on a two-week mission to check on the health of the island's ice sheets and glaciers.

The purpose of the Arctic Ice Mapping Project is to continue measuring the Greenland ice sheets and glaciers and monitoring changes.

Using instruments on aircraft, the science team has been closely monitoring the changes in the ice cover since 1991.

Past measurements have shown that areas of ice along the Greenland coast have been thinning while internal areas were thickening. However, taken as a whole, there has been more of an ice decrease. The data from past mapping missions and from Earth-orbiting satellites such as the NASA ICESat spacecraft, has shown that the ice cover has been melting at an increasing rate over the last several years.

"Knowledge of the ice in the polar glaciers, including those on Greenland, provide an indirect measure of sea-level changes and indicate trends in world climate," according to Bill Krabill, lead investigator of the Greenland mission from the NASA Wallops Flight Facility.

Krabill said, "This mission will build on data from past flights and aid in correlating data from the ice observing satellites."

NASA Photo

Flying on a NASA Wallops' P-3B aircraft, (above), a Wallops laser system will take detailed measurements of ice elevations. The accuracy is within a few inches.

Also on board will be an ice-penetrating radar system from the University of Kansas in Lawrence, that will provide elevation measurements on the bedrock below the ice.

From the measurements of these two instruments, researchers can determine the thickness of the ice.

It has been estimated that a 9-inch change in the average height of the central Greenland ice cover would result in a .12 inch change in the sea level of the world's oceans.

The aircraft, will be based out of Kangerlussauq and Thule Air Base and will cover flight lines that have been flown nearly annually since 1991.

Successful Sea-Based Missile Defense "Hit To Kill" Intercept

The Missile Defense Agency (MDA) has announced the successful completion of their latest "hit to kill" intercept flight test on April 26.

Northrop-Grumman employees from NASA Wallops Flight Facility staged and participated in the launch of a Terrier Orion sounding rocket to support the mission.

Conducted jointly with the U.S. Navy, the test involved the simultaneous engagements of a ballistic missile "unitary" target (meaning that the target warhead and booster remain attached) and a surrogate hostile air target.

The mission was completed by the Aegis Ballistic Missile Defense (BMD) cruiser USS Lake Erie using the Aegis BMD shipboard weapon system; the Standard Missile-3 against the ballistic missile target and the Standard Missile-2 against the surrogate hostile air target.

A short-range ballistic missile target (Terrier-Orion sounding rocket) was launched from the Pacific Missile Range Facility, Barking Sands, Kauai, Hawaii.

At the same time, a target with characteristics similar to a hostile high performance aircraft was launched from a Navy aircraft.

The Lake Erie's Aegis BMD system detected and tracked both targets and developed fire control solutions. Approximately one minute later, the Lake Erie's crew fired the SM-3 and SM-2 missiles.

Two minutes later both missiles successfully intercepted their respective targets.

The Aegis BMD system is the maritime component of the MDA's Ballistic Missile Defense System, and is designed to intercept and destroy short to intermediate-range ballistic missiles.

Mother's Day
May 13

Diversity Council Words to Live By

"We could learn a lot from crayons:
some are sharp,
some are pretty,
some are dull,
some have weird names,
and all are different colors....
but they all exist very nicely in the same box "

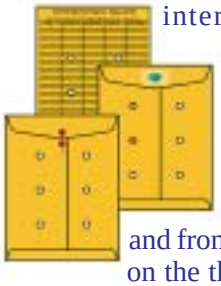
Author Unkown

Asian-Pacific American Heritage Month

Wallops Mail Services

Official Mail

The Wallops Mail Services Center (WMSC), located in Building E-7, processes incoming, outgoing, and interoffice business or official mail.



The WMSC offers walk-in service and the convenience of delivery and pickup to and from most of the buildings on the three Wallops sites; the Main Base, the Mainland and the Island.

The WMSC is open from 8 a.m. to 4:30 p.m., Monday through Friday. All outgoing U.S. Postal Service mail is metered and delivered to the Wallops Post Office by 3 p.m. daily.

Do not use the government mail service for personal mail.

Call Terry Ewell, WFF Mail Program Manager (Acting), at x1133 to express any concerns or suggestions for improved services.

Mentors Needed

Five local high school students have been selected to participate in the National Space Club Scholars Program for this summer.

Mentors are needed for the program that runs from June 25 through August 3. A mentor is only asked to supply office space and IT systems, if needed.

Wallops has supported Space Club Scholars for more than 22 years.

If you are interested in serving as mentor or would like additional information on the career goals for the individual students contact Ed Parrott at x1681 or by email: Edward.D.Parrott.1@gsfc.nasa.gov

Office Products Show

May 16
10 a.m. to 2 p.m.
Building F-3, Conference Room

For further information contact Linda Barnes at x1760.

Safe Boating Course

The U. S. Coast Guard Auxiliary, Flotilla 12-06 Chincoteague will be offering a two evening safe boating course at the USCG Station Chincoteague.

May 22 and May 23

6:30 p.m. on May 22
7 p.m. on May 23

Pre-registration encouraged. The course will cover learning to handle your boat safely and with confidence.

For further information and pre-registration call Janie Conquest at 757-824-6335 or email: jeconquest@verizon.net

A Farmer's Delight by Ted Wilz, Senior Meteorologist

After a very dry March, April proved to be a welcome relief to farmers across Delmarva, when we received 3.83 inches of rainfall.

This is exactly one inch above the monthly average. Most of that (2.61 inches) came courtesy of the "Nor'easter" that moved through the area on April 15 and 16.

The system also brought tropical storm strength winds of 53 mph to the region, quickly moving to the northeast, keeping the strong winds primarily offshore and minimizing any local flooding.

More surprising than the "Nor'easter" was the spring snow we received on April 7. After winter with a mere trace of snow, 3.5 inches of snow was recorded. This is by far the most ever recorded at Wallops during April.

As erratic as the monthly precipitation was during April, temperatures also varied quite a bit. We had four days with 80 degree temperatures or warmer. The first was on April 2, and the warmest day of the month was April 30.

A new daily record high was set when the temperature reached 84 degrees. There were four days when the low temperature dipped to 30 degrees or colder. We came within one degree of tying a record low when the temperature dipped to 28 degrees on April 10, the coldest day of the month.

The annual hurricane season begins in June. High temperatures start out in the upper 70's during early June. By the end of the month, temperatures are in the low 80's.

Overnight lows start out in the upper 50's, warming to the mid to upper 60's as July approaches. Measurable rain usually falls on nine days during June, totaling 3.32 inches. That can vary greatly as June precipitation often occurs in showers and drenching thunderstorms, which can skew the totals rapidly. Last June we received nearly 10 inches of rainfall. Tropical weather also becomes more of a reality.

Tech-Talks

May 17
1 p.m.
Project Support Building

Wallops Applied Engineering and Technology Directorate will begin a new technical series. Tech-Talks is a bi-monthly discussion of a technology or technical development that is open to all employees.

The first Tech-Talks will be on a Knowledgebase system developed by Rodney Davis, Wallops Systems Software Engineering Branch. The Knowledgebase is a project management tool built with standard office products. It provides an organized, comprehensive, customizable repository for all of the information related to a project. The system received kudos during the recent ISO audit debrief to GSFC management.

Inside Wallops is an official publication of Goddard Space Flight Center and is published by the Wallops Office of Public Affairs, Extension 1584, in the interest of Wallops employees. Recent and past issues of *Inside Wallops* also may be found on the NASA Wallops Flight Facility homepage: www.wff.nasa.gov

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